

REMARKS

Status of the Claims

Claims 1, 2, 19, 26 and 53-56 are in the application.

Claims 1, 2, 19, 26 and 53-56 have been rejected.

An Amendment after final was filed October 10, 2007, proposing to amending claims 1 and 2 and cancel claims 55 and 56.

The Advisory Action mailed November 16, 2007 indicated that claims 1 and 2 as amended would be allowable and that the rejection of claim 19, 26, 53 and 54 was maintained. The Advisory Action indicated that the amendment would be entered for purposes of the appeal.

By way of this amendment, the amendment of claims 1 and 2 is the same as proposed in the Amendment after final was filed October 10, 2007. Likewise, claims 55 and 56 are canceled as proposed in the Amendment after final was filed October 10, 2007. Additionally, by way of this amendment, claims 19 and 26 are amended and new claims 81-103 are added.

Upon entry of this amendment, claims 1, 2, 19, 26, 53, 54 and 81-103 will be pending.

Summary of Amendment

Claims 1 and 2 have been amended to specifically refer to the elected invention and delete reference to non-elected inventions. As amended, the language in both claims is clear that the peptide consists of SEQ ID NO:1.

Claims 19 has been amended to include a reference to the structure of the protein. As amended, claim 19 refers to the structure of the protein in relation to Ang-1 structure and function. Support for the amendment is found throughout the specification such as page 13, line 35 to page 14, line 7. No new matter has been added.

Claims 26 has been amended to include a reference to the structure of the protein. As amended, claim 26 refers to the structure of the protein in relation to Ang-1 structure and function. Support for the amendment is found throughout the specification such as page 13, lines 25-28. No new matter has been added.

Claims 55 and 56 have been canceled without prejudice.

New claims 81 and 82 are dependent on claims 54 and 53 respectively and refer to embodiments in which the Ang-1 fragment has a specific sequences. Support for the amendment is found throughout the specification and claims as originally filed. No new matter has been added.

New claims 83-93 are dependent on claim 19 and refer to embodiments in which the Ang-1 fragment has a specific level of structural homology to Ang-1. Support for the amendment is found throughout the specification such as page 13, line 35 to page 14, line 7. No new matter has been added.

New claim 94 is dependent on claim 19 and refers to embodiments in which the Ang-1 mutant has a specific sequences. Support for the amendment is found throughout the specification such as page 12, lines 17-19. No new matter has been added.

New claims 95-102 are dependent on claim 26 and refer to embodiments in which the Ang-1 fragment has a specific level of structural homology to Ang-1. Support for the amendment is found throughout the specification such as page 13, lines 25-28. No new matter has been added.

New claim 103 is dependent on claim 26 and refers to embodiments in which the Ang-1 mutant has a specific sequences. Support for the amendment is found throughout the specification such as page 13, lines 11-13. No new matter has been added.

Claim Rejections Under 35 U.S.C. § 112, first paragraph
Written Description Rejection

Claims 1, 2, 19, 26 and 53-55 have been rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The Advisory Action dated November 16, 2007 points out that claims 1 and 2 as amended are allowable but that the rejection of claims 19, 26, 53 and 54 were maintained. The Advisory Action indicates that the rejected claims lack structural limitation.

Claims 19 and 26 have been amended to recite specific structural limitations which were disclosed in the specification as filed. Thus, claims 19 and 26 recite both structural and functional limitations. The claims set forth specific structural and functional aspects to the proteins which could be routinely identified. Accordingly, the specification reflects that Applicants were in possession of the claimed subject matter at the time the application was filed.

Claims 53 and 54 refer to fragments of Ang-1, which accordingly is a structural limitation. Thus, claims 53 and 54 recite both structural and functional limitations. The claims set forth specific structural and functional aspects to the proteins which could be routinely identified. Accordingly, the specification reflects that Applicants were in possession of the claimed subject matter at the time the application was filed.

For the foregoing reasons, Applicants respectfully request that the allowability of amended claims 1 and 2, as indicated in the Advisory Action, be confirmed and that the rejection of claims 19, 26, 53 and 54 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement be withdrawn.

Enablement Rejection

Claims 1, 2, 19, 26 and 53-55 have been rejected under 35 U.S.C. §112, first paragraph, because the specification, while being enabling for the protein set forth in SEQ ID NO:1, allegedly does not reasonably provide enablement for any fragment thereof or any homologous peptide. Applicants respectfully disagree and request reconsideration.

The Advisory Action dated November 16, 2007 points out that claims 1 and 2 as amended are allowable but that the rejection of claims 19, 26, 53 and 54 were maintained. The Advisory Action indicates that the rejected claims were not enabled because of the level of unpredictability in the art. It has been asserted that because small changes in amino acid sequences can change the function of proteins, the specification is not enabled.

Applicants respectfully urge that the subject matter of claims have 19, 26, 53 and 54 is enabled and that those skilled in the art could practice the claimed invention without undue experimentation. One skilled in the art could readily make Ang-1 mutants with the structural limitations set forth in the claims and determine whether or not such peptides have the functional activities set forth in the claims. One skilled in the art could do so with an expectation that proteins having the structural characteristics set forth in the claims would also be functional. the testing to identify such proteins would be routine. There is no requirement that Applicants must describe every operable embodiments when making the embodiments is routine and testing to identify those with functional activity is also routine. Thus, claims 19 and 26 recite both are enabled.

For the foregoing reasons, Applicants respectfully request that the allowability of amended claims 1 and 2, as indicated in the Advisory Action, be confirmed and that the rejection of claims 19, 26, 53 and 54 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement be withdrawn.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 2, 19, 26 and 53-55 have been rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Davis, *et. al.*, U.S. Pat. No. 6,441,137 (hereinafter "Davis").

In the Advisory Action dated November 16, 2007, claims 1 and 2 as amended were indicated to be allowable and the rejections of claims 19, 26, 53 and 54 under section 112 were maintained. The Advisory Action provided a detailed discussion of the issues under section 112 but did not indicate that the rejection under section 102 would be maintained. As noted in the Amendment after final, Davis discloses a full length protein. Claims 1 and 2 refer to fragments of Ang-1 consisting of SEQ ID NO:1. Davis does not disclose fragments of Ang-1 consisting of SEQ ID NO:1. Claims 19 and 23 refer to mutant forms of Ang-1. Davis does not disclose mutant forms of Ang-1. Claims 54 and 55 refer to fragments of Ang-1. Davis does not disclose fragments of Ang-1. Davis does not disclose every limitation found in claims 1, 2, 19, 26, 54 and 55. Accordingly, Davis does not anticipate claims 1, 2, 19, 26, 54 and 55.

For the foregoing reasons, Applicants respectfully request that the allowability of amended claims 1 and 2, as indicated in the Advisory Action, be confirmed and that the rejection of claims 19, 26, 53 and 54 under 35 U.S.C. §102(b) as allegedly being anticipated by Davis be withdrawn.

Conclusion

In view of the foregoing, Applicant submits that the claims are in condition for allowance. Applicant respectfully requests that claims 1, 2, 19, 26, 53, 54 and 81-103 be allowed at this time.

An early indication of allowability and notice of allowance is earnestly solicited. Applicant invites the Examiner to contact the undersigned at 610-640-7855 to clarify any unresolved issues raised by this response.

As indicated on the transmittal accompanying this response, the Commissioner is hereby authorized to charge any debit or credit any overpayment to Deposit Account No. 50-0436.

Respectfully submitted,

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